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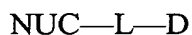
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This listing of claims will replace all prior versions and listings of claims in the application:

### Listing of Claims

46. (Currently Amended) A labelled nucleic acid compound having the formula:

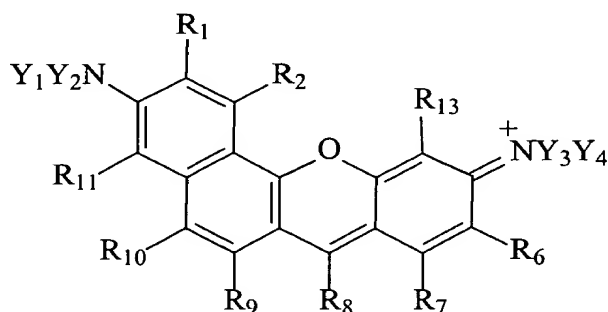
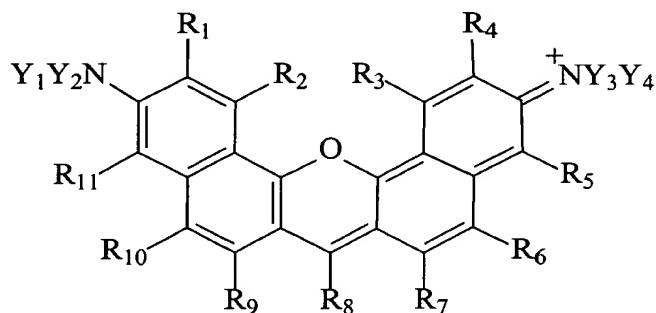


wherein

NUC is a nucleic acid compound selected from the group consisting of a nucleoside, a nucleotide, a polynucleotide and analogs thereof;

L is a linkage; wherein if NUC comprises a purine base, the linkage is attached to the 8-position of the purine, if NUC comprises a 7-deazapurine base, the linkage is attached to the 7-position of the 7-deazapurine, and if NUC comprises a pyrimidine base, the linkage is attached to the 5-position of the pyrimidine; and

D is an extended rhodamine dye comprising one of the following structures:



wherein

R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>9</sub>, R<sub>10</sub>, R<sub>11</sub>, and R<sub>13</sub> when taken alone are each independently selected from the group consisting of -H, alkyl, alkyl independently substituted with one or more Z<sub>1</sub>, heteroalkyl, heteroalkyl independently substituted with one or more Z<sub>1</sub>, aryl, aryl independently substituted with one or more Z<sub>1</sub>, heteroaryl, heteroaryl independently

substituted with one or more  $Z_1$ , arylalkyl, arylalkyl independently substituted with one or more  $Z_1$ , heteroarylalkyl, heteroarylalkyl independently substituted with one or more  $Z_1$ , halogen,  $-\text{OS(O)}_2\text{OR}$ ,  $-\text{S(O)}_2\text{OR}$ ,  $-\text{S(O)}_2\text{R}$ ,  $-\text{S(O)}_2\text{NR}$ ,  $-\text{S(O)R}$ ,  $-\text{OP(O)O}_2\text{RR}$ ,  $-\text{P(O)O}_2\text{RR}$ ,  $-\text{C(O)OR}$ ,  $-\text{NR}_2$ ,  $-\text{NR}_3$ ,  $-\text{NC(O)R}$ ,  $-\text{C(O)R}$ ,  $-\text{C(O)NR}_2$ ,  $-\text{CN}$ , and  $-\text{OR}$ , wherein each R is independently selected from the group consisting of  $-\text{H}$ , alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group; or

$R_1$  taken together with  $R_2$ ,  $Y_1$ , or  $Y_2$ ; and/or

$R_4$  taken together with  $R_3$ ,  $Y_3$ , or  $Y_4$ ; and/or

$R_5$  taken together with  $R_6$ ,  $Y_3$ , or  $Y_4$ ; and/or

$R_6$  taken together with  $R_7$ ,  $Y_3$ , or  $Y_4$ ; and/or

$R_{10}$  taken together with  $R_9$  or  $R_{11}$ ; and/or

$R_{11}$  taken together with  $Y_1$ , or  $Y_2$ ; and/or

$R_{13}$  taken together with  $Y_3$  or  $Y_4$  are selected from the group consisting of alkyleno, alkyleno independently substituted with one or more  $Z_1$ , heteroalkyleno, heteroalkyleno independently substituted with one or more  $Z_1$ , aryleno, aryleno independently substituted with one or more  $Z_1$ , heteroaryleno, and heteroaryleno independently substituted with one or more  $Z_1$ ;

$R_8$  is selected from the group consisting of  $-\text{H}$ , alkyl, alkyl independently substituted with one or more  $Z_1$ , heteroalkyl, heteroalkyl independently substituted with one or more  $Z_1$ , aryl, aryl independently substituted with one or more  $Z_1$ , heteroaryl, heteroaryl independently substituted with one or more  $Z_1$ , arylalkyl, arylalkyl independently substituted with one or more  $Z_1$ , heteroarylalkyl, and heteroarylalkyl independently substituted with one or more  $Z_1$ ;

$Y_1$ ,  $Y_2$ ,  $Y_3$ ,  $Y_4$  when taken alone are independently selected from the group consisting of  $-\text{H}$ , alkyl, alkyl independently substituted with one or more  $Z_1$ , heteroalkyl, heteroalkyl independently substituted with one or more  $Z_1$ , aryl, aryl independently substituted with one or more  $Z_1$ , heteroaryl, heteroaryl independently substituted with one or more  $Z_1$ , arylalkyl, arylalkyl independently substituted with one or more  $Z_1$ , heteroarylalkyl, and heteroarylalkyl independently substituted with one or more  $Z_1$ ; or

$Y_1$  taken together with  $R_1$ ,  $R_{11}$  or  $Y_2$ ; or

$Y_2$  taken together with  $R_1$ ,  $R_{11}$  or  $Y_1$ ; or

$Y_3$  taken together with  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_{13}$  or  $Y_4$ ; or

$Y_4$  taken together with  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_{13}$  or  $Y_3$  are selected from the group consisting of alkyleno, alkyleno independently substituted with one or more  $Z_1$ , heteroalkyleno, heteroalkyleno independently substituted with one or more  $Z_1$ , aryleno, aryleno independently

substituted with one or more  $Z_1$ , heteroaryleno, and heteroaryleno independently substituted with one or more  $Z_1$ ; and

each  $Z_1$  is independently selected from the group consisting of  $-R$ , halogen,  $-OS(O)_2OR$ ,  $-SO_2OR$ ,  $-SO_2R$ ,  $-SO_2NR$ ,  $-S(O)R$ ,  $-OP(O)O_2RR$ ,  $-P(O)O_2RR$ ,  $-CO_2R$ ,  $-NR_2$ ,  $-NR_3$ ,  $-NC(O)R$ ,  $-C(O)R$ ,  $-C(O)NR_2$ ,  $-CN$ ,  $-O$  and  $-OR$ , wherein  $R$  is independently selected from the group consisting of  $-H$ , alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group.

47. (Original) The labelled nucleic acid compound of claim 46 wherein

$Y_1$  is taken together with  $R_1$  or  $R_{11}$  and is  $C_2$  or  $C_3$  alkyleno or alkyleno independently substituted with one or more  $Z_1$ ; or

$Y_2$  is taken together with  $R_1$  or  $R_{11}$  and is  $C_2$  or  $C_3$  alkyleno or alkyleno independently substituted with one or more  $Z_1$ ; or

$Y_3$  is taken together with  $R_4$  or  $R_5$  or  $R_6$  or  $R_{13}$  and is  $C_2$  or  $C_3$  alkyleno or alkyleno independently substituted with one or more  $Z_1$ ; or

$Y_4$  is taken together with  $R_4$  or  $R_5$  or  $R_6$  or  $R_{13}$  and is  $C_2$  or  $C_3$  alkyleno or alkyleno independently substituted with one or more  $Z_1$ .

48. (Original) The labelled nucleic acid compound of claim 47 wherein the  $C_2$  or  $C_3$  substituted alkyleno is gem disubstituted with  $C_1-C_3$  alkyl.

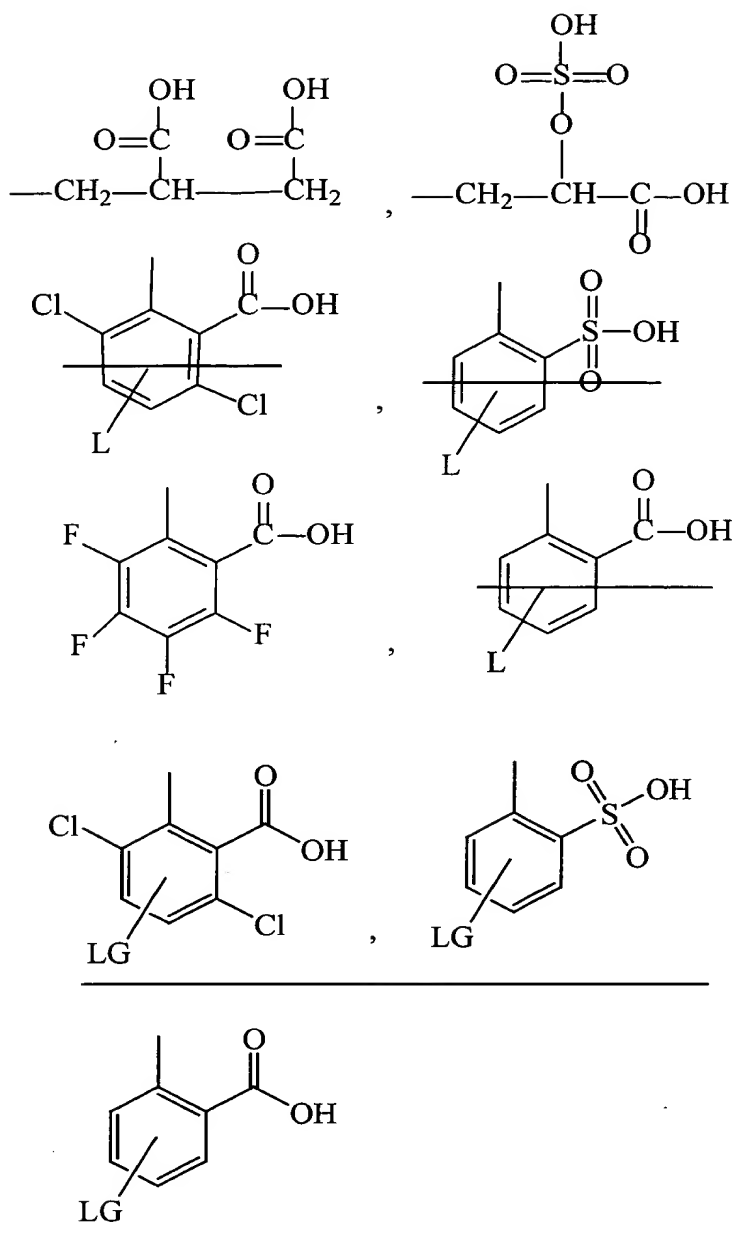
49. (Original) The labelled nucleic acid compound of claim 47 wherein the  $C_2$  or  $C_3$  substituted alkyleno is gem disubstituted with methyl.

50. (Currently Amended) The labelled nucleic acid compound of claim 46 wherein  $R_8$  is alkyl independently substituted with one or more substituents selected from halogen,  $-C(O)R$ , and  $-S(O)_2R$  wherein  $R$  is independently selected from  $-OH$ , O-alkyl,  $-NH_2$ , N-alkyl and a linkage linking group.

51. (Original) The labelled nucleic acid compound of claim 46 wherein  $R_8$  is  $-CF_3$ .

52. (Original) The labelled nucleic acid compound of claim 46 wherein  $R_8$  is aryl or aryl independently substituted with one or more  $Z_1$ .

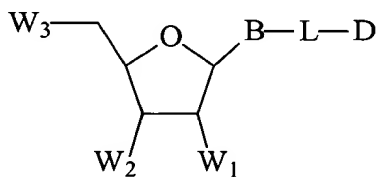
53. (Currently Amended) The labelled nucleic acid compound of claim 46 wherein  $R_8$  is selected from the structures:



wherein  $\text{L}$  LG is a linkage linking group.

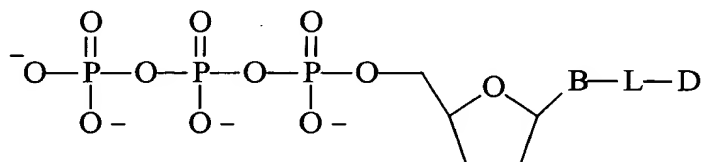
54. (Original) The labelled nucleic acid compound of claim 46 wherein NUC comprises a nucleobase selected from uracil, cytosine, deazaadenine, and deazaguanosine.

55. (Original) The labelled nucleic acid compound of claim 46 having the structure:



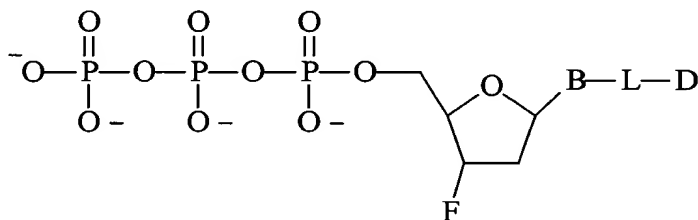
wherein B is a nucleobase;  $W_1$  and  $W_2$  taken separately are selected from  $-H$ ,  $-OH$ , and  $-F$ ; and  $W_3$  is selected from  $-OH$ , monophosphate, diphosphate, triphosphate and phosphate analog.

56. (Original) The labelled nucleic acid compound of claim 46 having the structure:



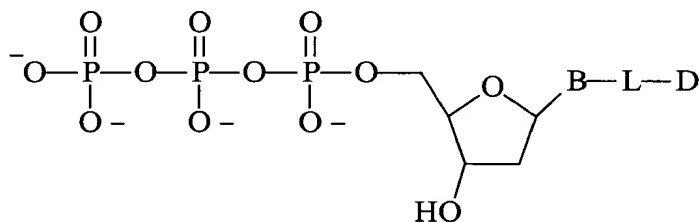
wherein B is a nucleobase.

57. (Original) The labelled nucleic acid compound of claim 46 having the structure:



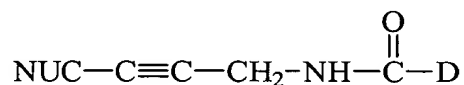
wherein B is a nucleobase.

58. (Original) The labelled nucleic acid compound of claim 46 having the structure:

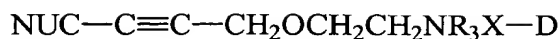


wherein B is a nucleobase.

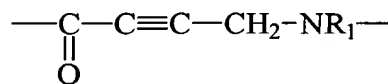
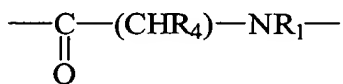
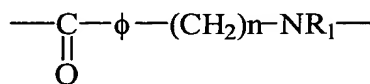
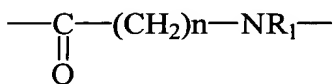
59. (Currently Amended) The labelled nucleic acid compound of claim 46 wherein L is attached to a nucleobase of NUC and to D ~~in~~ to form the structure:



60. (Currently Amended) The labelled nucleic acid compound of claim 46 wherein L is attached to a nucleobase of NUC and to D ~~in~~ to form the structure:



wherein  $\text{R}_3$  is selected from  $-\text{H}$  and  $(\text{C}_1-\text{C}_6)$  alkyl; and  $\text{X}$  is selected from the structures:



where  $n$  ranges from 1 to 5;  $\phi$  is arylidyl; and  $\text{R}_1$  is selected from  $-\text{H}$ ,  $(\text{C}_1-\text{C}_6)$  alkyl and protecting group.

61. (Original) The labelled nucleic acid compound of claim 46 wherein  $\text{L}$  is attached at  $\text{R}_8$  of  $\text{D}$ .

62. (Cancelled)

63. (Original) The labelled nucleic acid compound of claim 46 wherein  $\text{NUC}$  is a polynucleotide and  $\text{L}$  is attached to the polynucleotide at a position selected from the 5' terminus, the phosphodiester backbone, a nucleobase, and the 3' terminus.

64. (Currently Amended) The labelled nucleic acid compound of claim 63 wherein  $\text{L}$  is comprises an aminohexyl linkage linking group,  $\text{NUC}$  is a polynucleotide and  $\text{L}$  is attached to the polynucleotide at the 5' terminus.

65-75. (Cancelled)